

ATTORNEY DOCKET NO.
97RSS178C

PATENT
Customer ID No. 33649

In the claims:

21. (Previously presented) A system for receiving a signal comprising:
a receiver receiving the signal;
an interference avoidance system coupled to the receiver, the interference avoidance system turning the receiver off and on at a controllable frequency; and
wherein the interference avoidance system applies a first duty cycle if interference is present and a second duty cycle if interference is not present.

22. (Previously presented) The system of claim 21 wherein the receiver further comprises a plurality of stages.

23. (Previously presented) The system of claim 21 wherein the receiver further comprises:

a plurality of stages; and
a duty cycle system coupled to two or more of the plurality of stages, the duty cycle system turning each of the two or more of the plurality of stages off and on at a separately-controllable frequency.

24. (Previously presented) The system of claim 21 wherein the receiver further comprises:

a mixer stage changing the frequency of the signal;
a band pass stage coupled to the mixer stage, the band pass stage filtering the signal;
an automatic gain control stage coupled to the band pass stage, the automatic gain control stage controlling the gain of amplification of the signal; and
a duty cycle system coupled to the mixer stage and the automatic gain control stage, the duty cycle system turning the mixer stage on and off at a first frequency, and turning the automatic gain control stage on and off at a second frequency.

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25. (Previously presented) The system of claim 21 wherein the receiver further comprises a mixer stage changing the frequency of the signal, and a duty cycle system coupled to the mixer stage turning the mixer stage on and off.

26. (Previously presented) The system of claim 21 wherein the receiver further comprises an automatic gain control stage controlling a gain of amplification of the signal, and a duty cycle system coupled to the automatic gain control stage and turning the automatic gain control stage on and off.

27. (Previously presented) The system of claim 21 further comprising a signal strength system.

28. (Previously presented) The system of claim 21 wherein the interference avoidance system determines whether the magnitude of the signal output changes for a corresponding change in a duty cycle.

29. (Previously presented) The system of claim 21 wherein the interference avoidance system receives duty cycle data from a duty cycle system and selects a duty cycle based upon the duty cycle data.

30. (Previously presented) The system of claim 21 wherein the receiver further comprises:

- a mixer stage changing the frequency of the signal; and
- a band pass stage filtering the signal.

31. (Previously presented) A system for avoiding interference comprising:
a signal input receiving a signal and determining whether interference is present; and
a receiver cycling output outputting control data for turning a receiver on and off based on whether interference is present.

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32. (Previously presented) The system of claim 31 wherein the signal has been processed by a receiver.

33. (Previously presented) The system of claim 31 wherein the signal is a spread spectrum signal.

34. (Previously presented) The system of claim 31 wherein the receiver cycling output generates duty cycle control data.

35. (Currently amended) A method for processing a signal comprising:
receiving interference status data;
cycling a receiver component according to a first duty cycle if the interference status data indicates that the signal includes ~~a noise signal~~ an interfering signal and
cycling the receiver component according to a second duty cycle if the interference status data indicates that the signal includes the ~~noise signal~~ interfering signal.

36. (Previously presented) The method of claim 35 wherein the receiver component is a mixer.

37. (Previously presented) The method of claim 35 wherein the receiver component is an automatic gain control system.

38. (Previously presented) The method of claim 35 wherein the first duty cycle is a preset duty cycle.

Claims 39 and 40 (cancelled).

41. (New) The system of claim 31 wherein the signal input receives the signal and determines whether interference is present by adjusting a duty cycle and determining whether a magnitude of an output signal increases or decreases in response to the adjustment of the duty cycle.

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42. (New) The system of claim 31 wherein the signal input receives the signal and determines whether the interference is an interfering channel and not system noise.